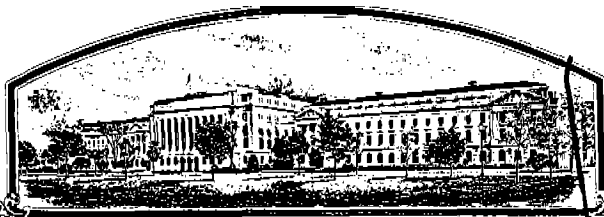


No.

8200084



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Royal Sluis, B.V.

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED SOVEL VARIETY OF SEXUALLY REPRODUCED PLANT. THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT, 1930, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

MARIGOLD

'Calando Lemon Yellow'



In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington
this 28th day of February in
the year of our Lord one thousand nine
hundred and eighty-three.

Attest

Kenneth H. Evans
Acting
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R. Block
Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY		1b. VARIETY NAME Calando Lemon Yellow		FOR OFFICIAL USE ONLY PV NUMBER 8200084	
2. KIND NAME MARIGOLD R/S		3. GENUS AND SPECIES NAME Tagetes ERECTA R/S		FILING DATE 3/15/82	TIME 8:30 A.M.
4. FAMILY NAME (BOTANICAL) Compositae		5. DATE OF DETERMINATION September 1979		FEE RECEIVED \$ 250.00 \$ 250.00 250.00	DATE 3/15/82 3/15/82 2/3/83
6. NAME OF APPLICANT(S) Royal Sluis B.V.		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Resteinde 161, P.O. Box 22 1600 AA ENKHUIZEN Holland		8. TELEPHONE AREA CODE AND NUMBER	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Netherlands		11. DATE OF INCORPORATION	

12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS:

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☐ 13B. Exhibit B, Novelty Statement.
- ☐ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☐ 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a).) (If "Yes," answer 14B and 14C below.) cl YES ☒ NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? cl YES ☐ NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED?
☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☒ YES ☐ NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

August 26, 1981

(DATE)

March 4, 1982

(DATE)

(SIGNATURE OF APPLICANT)

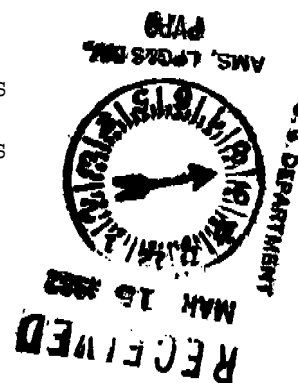
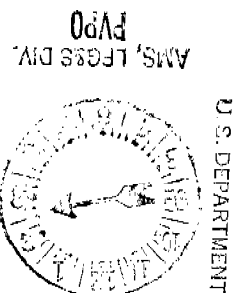
(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 -- viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- 5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give: (1) the genealogy, **including public and commercial** varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of **uniformity** and stability.
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- 14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety **has either** been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.



Application for P.V.P.

Tagetes Calando Lemon Yellow

Exhibit A

Calando Lemon Yellow has been developed from crossings between the **F1** Hybrids Apollo and First Lady.

Used techniques: single crosses, inbred techniques and single plant selection.

When propagated from seed the following variants occur:

singles		1 %
semi doubles	+	2 %
taller types		1 %

Calando ~~Deep Orange~~ ^{LEMON Yellow} appears stable and uniform after selfing and during the seed increase programme. *R/S 12/14/82*

8200084

Item 4 correct **leafsize** of the separate leaves is:

length **3,5** cm width **0,9** cm

(sorry for the mistake)

Appendix to Exhibit A

Results production 1981:

singles	0,1 %
semi-doubles	1,6 %
taller types	0,2-x

This is typical for an open pollinated Marigold and stable for a uniform propagation.

This is commercially acceptable.





ROYAL SLUIS

KONINKLIJKE ZAAIZAADBEDRIJVEN GEBROEDERS SLUIS B.V.

United States Dept. of Agriculture
National Agricultural Library Building
Att. Mr. Robert J. Snyder
Plant Variety Protection Office
BELTSVILLE, MD 20705
U.S.A.

POSTBOX 22, 1600 A A ENKHUIZEN
HOLLAND

EXHIBIT B

December 3, 1982

Dear Mr. Snyder,

Subject: Marigold applications no. 8200084 and no. 8200082.

Your letter dated August 17, 1982.

8200084 Calando Lemon Yellow

*IS MOST SIMILAR TO 'MOONSHOT' AND
'PRIMROSE LADY', R/S 12/14/82*

Height Calando Lemon Yellow 30 cm S 0,6 N 40

Height Moonshot 26 cm S 0,6 N 80

Height Primrose Lady 34 cm S 0,6 N 80

These data are based on different locations over two years.

Moonshot is always dwarfer, Primrose Lady always taller.

Color Calando Lemon Yellow - Lemon Yellow

Color Lady Sunshine - Orange

Color Spun Gold - Golden Yellow

Flower form Calando Lemon Yellow - Carnation type

Flower form Lady Sunshine - Carnation type

Flower form Spun Gold - Chrysanthemum type

Marigold Application 8200084 "Calando Lemon Yellow"

Appendix to Exhibit B

Height Calando Lemon Yellow

30 cm \pm 2 cm (S = 0,6 N = 40)

Height Moonshot

26 cm \pm 2 cm (S = 0,6 N = 40)

Height Primrose Lady

33 cm \pm 1,5 cm (s = 0,5 N = 30)

Appendix to Exhibit C

Ploidy of Tagetes **erecta** is diploid

Literature:

Tagetes **erecta** L. 2N = 24 diploid

Tagetes patula L. 2N = 48 tetraploid

Publications:

- Les Tagetes

Origine et **principales caractéristiques** botaniques et **cytogénétiques**.

J. Miegé, professeur, directeur des Conservatoire et **Jardin** botaniques de **Genève**.

- Genetisch - **züchterische** Untersuchungen **bei** Tagetes.

G. Eolz 1961 - Institut für Gärtnerei Pflanzenzüchtung der Technische Hochschule Hannover.

- Genetic Study in the Genus Tagetes.

Eyster W.H. 1939 - Proceedings of the 7th Int. **Genetica** Congress 117 - 119.



Calando Lemon Yellow

FORM GR-470-9
(9-15-72)UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782EXHIBIT C
(Marigold)OBJECTIVE DESCRIPTION OF VARIETY
MARIGOLD (TAGETE)

INSTRUCTIONS • See Reverse.

NAME OF APPLICANT(S)
Royal Sluis B.V.

ADDRESS (Street and No., or R.F.D. No.; City, State, and ZIP Code)

Westeinde 161, P.O. Box 22,
1600 AA ENKHUIZEN, Holland

FOR OFFICIAL USE ONLY

PVPO NUMBER

8200084

VARIETY NAME OR TEMPORARY
DESIGNATION

CALANDO LEMON YELLOW

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in first box (e.g.

1. SPECIES TYPE:

= ERECTA (African) 2 = PATULA (French) 3 = TENUIFOLIA (Signata) 4 = LUCIDA (Sweet)
5 = OTHER (Specify) _____

2. PLOIDY:

1 = DIPLOID (n = _____) 2 = TRIPLOID (n = _____) 3 = TETRAPLOID (n = _____)

3. PLANT TYPE/HABIT:

1 = EXTRA DWARF (Miniature, petite) < 20 CM. 2 = DWARF 25-35 CM. 3 = SEMIDWARF 40-55 CM. 4 = TALL > 60 CM.

1 = ERECT 2 = SEMIERECT 3 = DECUMBENT

1 = COMPACT 2 = LAX

1 = Flowering: 1 = LONG SEASON 2 = SHORT SEASON

4. LEAF (Middle of first flowering branch):

Type: 1 = SIMPLE 2 = COMPOUND

Leaflet: 1 = OVATE 2 = LANCEOLATE 3 = ELLIPTIC 4 = FILIFORM

Margin: 1 = ENTIRE 2 = CRENATE 3 = SERRATE 4 = DENTATE 5 = INCISED

3.5 R/S
CM. LONG

0.9
MM. WIDE

Anthocyanin pigment in petioles: 1 = ABSENT 2 = PRESENT

Glands: 1 = PUNCTATE 2 = LARGE DOTS 1 Glands: 1 = 2 = APICAL

Odor: 1 = NONE 2 = MILD FRAGRANCE 3 = STRONG FRAGRANCE 4 = MILD "MARIGOLD" 5 = STRONG "MARIGOLD"

5. STEM:

1 = STRAIGHT 2 = ZIGZAG

1 = BRITTLE 2 = FLEXIBLE

Anthocyanin: 1 = ABSENT 2 = ALONG VEIN ONLY 3 = SOLID COLORATION

CM. FROM BASE OF STEM TO INVOLUCRE
OF TERMINAL FLOWER

CM. FROM BASE OF MAIN STEM
TO AXIL OF TOP BRANCH

CM. FROM AXIL OF TOP BRANCH TO INVOLUCRE
OF TERMINAL FLOWER

NO. OF INTERNODES BELOW FIRST BRANCH

NO. OF FIRST ORDER BRANCHES (from main stem)

6. FLOWER:

1 Type: 1 = CARNATION 2 = CHRYSANTHEMUM 3 = OTHER _____

a 2 1 = SINGLES 2 = DOUBLES

a 3 Silhouette: 1 = FLATTENED 2 = ROSETTE 3 = GLOBULAR

1 Odor: 1 = NONE 2 = MILD FRAGRANCE 3 = STRONG FRAGRANCE 4 = MILD "MARIGOLD" 5 = STRONG "MARIGOLD"

6

6. FLOWER: (Continued)

☐2 Ray: 1 ☐ FLATTENED 2 ☒ CURLED/TWISTED (*Fantastic*)c1 2 Apices: 1 ☐ ENTIRE 2 ☐ LOBED 3 ☐ NOTCHED☐1 SURFACE • Dorsal: }
c1 1 SURFACE • Ventral: } 1 = GLABROUS 2 ☒ PUBESCENT 3 = PUBESCENT ON **APICE** ONLY☐2 LUSTER • Dorsal: }
1 LUSTER • Ventral: 1 = SHINY 2 ☐ DULL☐1 PATTERN • Dorsal: } 1 ☐ SOLID 2 = SPOTTED 3 ☐ STRIPED
1 PATTERN • Ventral: } 4 ☐ PICOTEE 5 = OTHER (Specify) _____☐Color: 1 = SOLID 2 = BICOLOR (*Specify colors*): Primary 76 Secondary 7c
State color standards used: RHS CCSIZE (Use outer row of first *matured* flower):☐

MM. LONG

☐

MM. WIDE

Disc: 1 = ABSENT 2 = PRESENT, COVERED 3 = PRESENT, UNCOVERED

☐

Type: 1 = NOT QUILLED 2 = QUILLED

7. DISEASE RESISTANCE (0 = Not Tested; 1 = Susceptible; 2 = *Resistant*)☐ROOT-ROT (*Phytophthora*)

0

c /

VIRUS YELLOWS

☐GREY MOLD (*Botrytis*)☐

FUSARIUM WILT

☐STEM ROT (*Sclerotinia*)☐

WITCHES BROOM

8. INDICATE A VARIETY THAT MOST NEARLY RESEMBLE THAT SUBMITTED

CHARACTER	VARIETY	CHARACTER	VARIETY
Plant shape	F1 Moonshot	Flower size	F1 First Lady
Plant size	F1 First Lady	Flower shape	F1 Moonshot
Foliage	F1 First Lady	Flower color	F1 Primrose Lady

INSTRUCTIONS

REFERENCES: The following publications may be used as a reference aid for completing this form:

- (a) Bailey, L. H., 1949, Manual of Cultivated Plants, MacMillan.
- (b) Royal Horticulture Society, 1965, Dictionary of Gardening, Oxford.
- (c) Wyman, Donald, 1971, Wyman's Gardening Encyclopedia, MacMillan.

COLOR: Nickerson's or any recognized color fan may be used to determine the colors.